

TWO NEW GENERA AND SPECIES OF PENTATOMINI FROM PERU AND BRAZIL (HEMIPTERA: PENTATOMIDAE)

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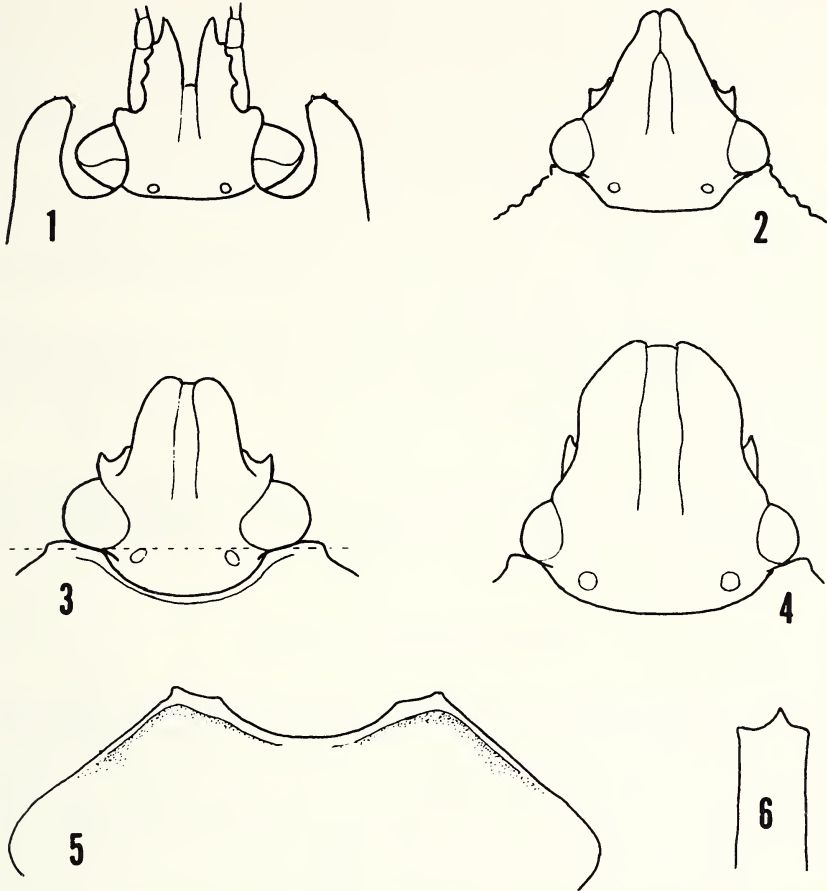
Abstract.—Two new monotypic genera, each based on a new species, are described from eastern Peru and western Brazil. These genera are among those of the Pentatomini tribe that do not have a median spine or tubercle at the base of the abdominal venter, and among the few South American genera of this group with much elongated ostiolar rugae. A key to these genera is provided.

Among the genera of Pentatomini that do not have a basal spine or tubercle on the abdominal venter, there are seven occurring in South America that have markedly elongated ostiolar rugae. In these genera the length of the ostiolar ruga on each side is $\frac{3}{5}$ or more of the distance from the mesial margin of the ostiole to the lateral margin of the metapleuron. Only one other South American genus among the genera of Pentatomini lacking a basal spine or tubercle on the abdominal venter has ostiolar rugae approaching this length. This genus, the monotypic *Cauracia* Stål, can hardly be confused with any other (Fig. 1).

The seven genera in question do not form a phylogenetic group, but their much elongated ostiolar rugae distinguish them among more than half a hundred genera of Pentatomini in South America. The following key separates the seven genera. Two of these genera are new, each monotypic and each based on a new species.

KEY TO GENERA

- 1. Jugs surpassing tylus, contiguous apically or leaving deep incision or emargination in apex of head (Figs. 2, 7) 2
- Jugs no longer than tylus, or only slightly longer and either rounded apically or leaving shallow, quadrate emargination in apex of head (Figs. 3, 4, 13) 3
- 2(1). Metasternum obtusely produced with anterior, posterior and lateral buttresses (Fig. 9); apex of rostrum passing procoxae but not reaching mesocoxae; superior surface of femora unarmed apically *Patanius*, new genus
- Metasternum nearly flat; apex of rostrum between or projecting beyond metacoxae; superior surface of femora projecting apically as small tooth (Fig. 6) . *Chloroepela* Stål
- 3(1). Femora armed on inferior surface with pairs of small tubercles (Fig. 15); imaginary line traversing head at posterior limit of reticulated portion of both eyes passing through ocelli when dorsum of head horizontal (Fig. 13) *Senectius*, new genus
- Femora unarmed; ocelli behind or just touching such imaginary line (Fig. 3) 4
- 4(3). Rostrum projecting past abdominal apex; length of head before eyes about $\frac{1}{10}$ of greatest width before eyes *Brasilania* Jensen-Haarup
- Rostrum reaching no farther than fifth visible sternite; length of head before eyes $\frac{1}{10}$ or less of greatest width before eyes 5



Figs. 1-6. 1. *Cauracia sexdens* Stål, head and anterolateral pronotal angles. 2. *Chlorocephala vigens* (Stål), head. 3. *Arocera spectabilis* (Drury), head. 4. *Cyptocephala cogitabunda* Berg, head. 5. *Arocera spectabilis* (Drury), anterior and anterolateral pronotal margins. 6. *Chlorocephala vigens* (Stål), superior surface of femur distally.

- 5(4). Anterolateral margins of pronotum reflexed or rimmed, especially at anterolateral angles (Fig. 5); 12 mm or more in length or if smaller then yellow to red with conspicuous dark markings *Arocera* Spinola
- Anterolateral margins of pronotum weakly reflexed at most; less than 12 mm in length 6
- 6(5). Parameres bilobed, finely denticulate between lobes *Cyptocephala* Berg
- Parameres acute or subacute apically, without denticles *Thyanta* Stål

Patanius, new genus

Type species. Patanius vittatus, new species.

Diagnosis. Juga contiguous before tylus, broadly so or dehiscent, their lateral mar-

gins concave before antecular projection. Interocular width about $\frac{3}{5}$ width of head across eyes. Imaginary line traversing head at posterior limit of reticulated part of both eyes passing before ocelli when dorsum of head horizontal (Fig. 7). Antennae 4-segmented, basal segment projecting past apex of head. Each buccula a large lobe directed anteroventrad (Fig. 8). Basal segment of rostrum projecting beyond bucculae; rostral apex reaching beyond procoxae but not attaining mesocoxae.

Scutellum about $\frac{1}{3}$ longer than wide at base; width at distal end of frena about $\frac{3}{10}$ of basal width. Costal angle of each corium reaching last tergite before genitalia.

Anterior margin of propleura not produced. Ostiolar ruga on each side extending about $\frac{7}{10}$ distance from mesial margin of ostiole to lateral margin of metapleuron. Femora unarmed; tibiae weakly sulcate dorsally.

Prosternum nearly flat. Mesosternum somewhat tumid, scarcely carinate mesially. Metasternum obtusely produced with buttress anteriorly, posteriorly and laterally between each mesocoxa and metacoxae (Fig. 9). Base of abdomen without mesial spine or tubercle.

Parameres absent.

Remarks. The absence of parameres is rare among pentatomoids, but among American pentatomines this characteristic is shared with an unnamed genus and with *Rhyncholepta* Bergroth, a genus containing two very similar species (Becker and Grazia-Vieira, 1971).

Patanius vittatus, new species

Figs. 7-12

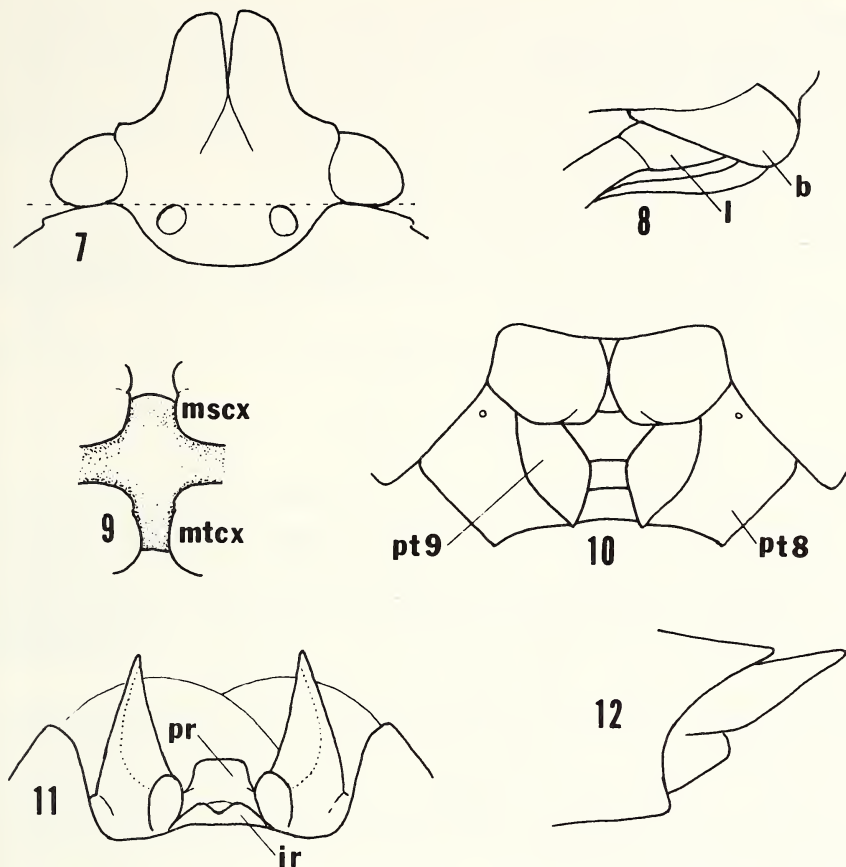
Description. Predominately green with light yellow markings most evident as dorsal stripes; colors deteriorate to olive green and rusty yellow. Body length excluding hemelytral membranes about 10.5 mm.

Lateral margins of juga, tylus, and sometimes vertex yellow. Lateral jugal margins strongly concave before obtuse antecular process. Vertex convex. Width of head across eyes 2.05-2.2 mm, length from ocelli to apex 1.2-1.25 mm; interocular width 1.2-1.3 mm; distance across ocelli 0.8-0.9 mm. Ocelli rather large, 0.2 mm at greatest diameter. Antennal segments 1-4 about 0.6-0.65, 2.4-2.7, 1.8-2.1, 2.1-2.25 mm long; basal segment green, remaining segments light brown.

Pronotum with anterolateral margins and three intramarginal transverse bands yellow, calloused or subcalloused, impunctate or nearly so; two of these bands on anterior disk, separated by depression. Anterolateral margins straight; humeri projecting a little laterad beyond base of hemelytra, narrowly rounded. Width of pronotum at humeri 5.4-5.5 mm; mesial length 2.3-2.4 mm.

Yellow markings on scutellum consisting of: basal, calloused, caudally curved band connecting basal angles; subbasal chevron beginning submarginally on each side, pointing toward scutellar apex; thin mesial line connecting basal band and apex of chevron, continuing as broader band to scutellar apex; lateral scutellar margins from level of chevron to distal ends of frena.

Each corium marked by four yellow bands, one basally on clavus, three on endocorium as follows: one along clavical suture, one beginning about basal third of corium at R+M vein and curving across disk, one along distal third of R+M vein. Corial margins joining membranes subparallel; costal angle of each corium rounded.



Figs. 7–12. *Patanius vittatus*. 7. Head. 8. Bucculae and basal segment of labium (b, buccula; l, labium). 9. Metasternum (mscx, mesocoxa; mtcx, metacoxa). 10. Genital plates (pt 8, paratergite 8; pt 9, paratergite 9). 11. Pygophore, ventral view (ir, inferior ridge; pr, proctiger). 12. Pygophore, lateral view.

Membranes hyaline, each with fumose streak near corium and four or five simple veins.

Connexiva yellow to orange, their transverse sutures bordered on both sides with green to black band. Posterolateral angle of each segment projecting slightly, acute.

Venter green, mottled with yellow, impunctate. Lateral margins of abdominal venter edged in black on both sides of sutures between sternites.

Posterior margin of each basal plate broadly rounded; apex of 9th paratergite acute, of 8th paratergite right-angular (Fig. 10). Spiracle present on 8th paratergite.

Posterolateral corners of pygophore acuminate, projecting well beyond last tergite before genitalia, their mesoventral surface concave, firmly attached to remainder of pygophore but largely separated in partially cleared pygophore by apparent, unpigmented suture (Fig. 11); pair of large, subparallel, obtuse ridges flanking ventral

emargination of pygophore (Fig. 12). Inferior ridge almost membranous, nearly horizontal, mesially emarginate, largely closing ventral opening of proctiger distally. Proctiger without tubercles. Theca heavily pigmented, arcuate from lateral view, lacking lobes or appendages distally; median penial lobes joined at base ventrally, forming trough; penisfilum sigmoid, not projecting beyond median penial lobes; single conjunctival diverticulum dorsomedial, cylindrical, hyaline.

Distribution. Brazil (Rondônia, Mato Grosso).

Holotype. ♂ labeled "Brésil, Rondônia" (white label pasted on purple label), "Coll. R. I. Sc. N. B., Bresil" (purple label). Part of four legs are glued to a card beneath the specimen. The genitalia are in an attached vial. Deposited in the Institute Royal de Sciences Naturelles de Bruxelles.

Paratypes. 2♀♀, labeled as holotype; ♀ labeled "Brazil, Mato Grosso: Vila Vera, 52°30' long., 12°46' lat. Oct. 1973. M. Alvarenga."

Senectius, new genus

Type species. *Senectius metallicus*, new species.

Diagnosis. Apex of head narrowly rounded, tylus a little longer than juga; lateral jugal margins concave above antennifers; anteocular processes lacking. Interocular width about half width of head across eyes. Imaginary line traversing head at posterior limit of reticulated part of eyes passing through ocelli when dorsum of head horizontal (Fig. 13). Antennae 5-segmented; basal segment reaching apex of head. Bucculae acutely toothed anteriorly, lobed posteriorly (Fig. 14). Basal segment of rostrum projecting beyond bucculae, rostral apex lying between metacoxae.

Scutellar length and basal width subequal; width of scutellum at distal end of frena nearly 2.5 of basal width. Costal angle of each corium reaching last tergite before genitalia. Anterior margins of propleura not produced. Ostiolar ruga on each side reaching about $\frac{3}{4}$ distance from mesial margin of ostiole to lateral margin of metapleuron. Femora armed on inferior surfaces with pairs of small tubercles, each bearing seta (Fig. 15); tibiae sulcate dorsally.

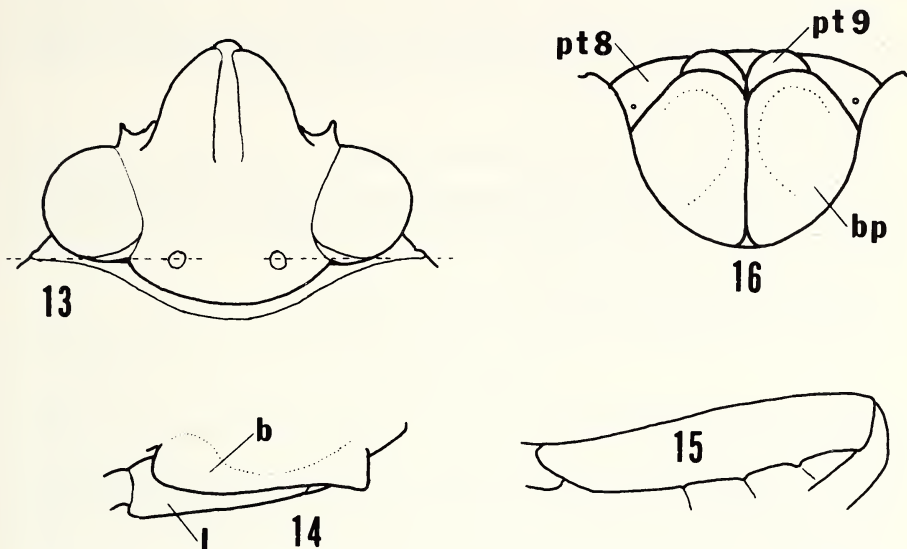
Prosternum shallowly concave longitudinally with weak medial carina anteriorly. Mesosternum weakly carinate medially. Metasternum nearly flat, sloping slightly ventrad from anterior to posterior margin.

Senectius metallicus, new species

Figs. 13-16

Description. Ground color light brown to castaneous dorsally and light yellow to brownish yellow ventrally, with extensive areas of metallic green and black; a few ivory markings. Body length excluding hemelytral membranes about 7.5 mm.

Dorsum of head metallic green, rather flat before eyes, lateral jugal margins slightly reflexed. Width of head across eyes 2.05 mm, length from ocelli to apex 1.2-1.25 mm; interocular width 0.95-1.0 mm; distance across ocelli 0.7 mm. Ocelli about 0.1 mm in diameter. Basal part of first antennal segments pale, remainder of antennae black; length of segments 1-5 about 0.4-0.45, 1.0-1.1, 1.1-1.3, 1.6, 1.65 mm (fused 4+5 in holotype 2.5 mm long). Rostral segments 2-4 about 1.0, 1.0, 1.3 mm long; first segment and base of second pale, remainder of rostrum fuscous.



Figs. 13–16. *Senecticus metallicus*. 13. Head. 14. Buccula and basal segment of labium (b, buccula; l, labium). 15. Femur. 16. Genital plates (bp, basal plate; pt 8, paratergite 8; pt 9, paratergite 9).

Anterior, posterior and posterolateral pronotal margins and humeri bordered in metallic green. Transverse, impunctate band behind cicatrices and edge of anterolateral margins cephalad of this band, light yellow. Anterolateral margins nearly straight. Pronotal width at humeri 4.6 mm, mesial length 1.9 mm.

Mesial spot at base of scutellum, another at apex, ivory; tongue more or less metallic green. Width of scutellum at base 3.0 mm, at distal end of frena 1.1 mm; mesial length 2.9 mm.

Exocorium and posterolateral angle of endocorium of each hemelytron metallic green; adjacent area of endocorium blackish, impunctate, with ivory spot; corial spots and spot on scutellar apex nearly in line. Distal margin of each corium concave, costal angle acute. Membranes of hemelytra heavily fumose, projecting well past apex of body; veins numerous, simple.

Exposed portion of connexiva yellowish, immaculate excepting lateral edge of segments at and near posterolateral angles dark; these angles protruding slightly.

Venter of head yellow. Thoracic venter metallic green, excluding dark evaporative areas, with yellow as follows: on prothorax a narrow border along anterior margin between eyes, narrow border along posterior margin, and broad lateral borders; on mesothorax lateral borders and posterolateral corners; on metathorax posterolateral corners; area bordering each supracoxal cleft. Coxae, trochanters and basal region of middle and hind femora yellow, remainder of legs dark brown to black. Abdominal venter yellow with sternites 2–4 (first three visible) black exclusive of broad borders laterally and sometimes a pair of spots near meson of sternite 4; on remaining sternites sutures between them, pseudosutures, and mesial line may be dark in part or whole.

Basal plates convex proximally, quite concave distally, nearly reaching apex of abdomen (Fig. 16). Only apex of paratergite 9 exposed. Spiracles present on paratergite 8.

Male unknown.

Distribution. Peru (Madre de Dios).

Holotype. ♀, labeled "Ob Madre de Dios, Garlepp V." (green label); "Zool. Mus. Berlin" (yellow label). All of the left antenna except the basal segment, the tarsus of the left front leg, and the right middle leg beyond the trochanter are missing. Segments 4 and 5 of the right antenna are fused. Deposited in the Museum für Naturkunde an der Humboldt-Universität zu Berlin.

Paratype. ♀, labeled as holotype. Rostrum damaged.

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